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STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. Box 47600 • Olympia, Washington 98504-7600 • (206) 407-6000 • TDD Only (Hearing Impaired) (206) 407-6006

April 6, 1994

Mr. Dean Fowler, Project Manager
Spokane County Utilities Department
North 811 Jefferson Street
Spokane, WA 99201

Dear Mr. Fowler:

RE: Interim Discharge Requirements to the Little Spokane River

As discussed in the public meeting in Spokane on March 3, 1994, the Department of Ecology is committed to working with Spokane County in establishing interim discharge requirements during the start-up phase of the groundwater treatment system.

The interim testing requirements are intended to eliminate any redundant tests or tests that can be proved during this period to be unnecessary, and to consequently, reduce the remediation cost to Spokane County. The final substantive requirements for discharge to the Little Spokane River may include only contaminants of concern and any additional parameters the Department of Ecology has concluded are needed, as a result of this interim testing period.

This letter is intended to acknowledge Spokane County's request to discharge treated groundwater to the Little Spokane River, as indicated in the Record of Decision dated September, 1987, and subject to the interim discharge requirements (see attachment).

Interim discharge of treated groundwater from Colbert Landfill is limited to 90 days, beginning on the start-up date of April 11, 1994. Attachment "B" outlines the schedule for issuance of final substantive requirements for long-term discharge to the Little Spokane River, as discussed at the March 3 public meeting (revised) and as agreed to by Spokane County.

If you have any questions regarding this issue, please call me at (206) 407-7181.

Sincerely,

Ali M. Raad, Project Engineer
Toxics Cleanup Program

AMR:ln
Enclosures

cc: Mike Kuntz
Ken Murrall, ERO

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INTERIM DISCHARGE REQUIREMENTS

State of Washington
DEPARTMENT OF ECOLOGY
Toxics Cleanup Program
Site Cleanup Section
P.O. Box 47600
Olympia, Washington 98504-7600

Facility Location:	Spokane County Colbert Landfill
Discharge Type:	Remediation of Contaminated Groundwater
Discharge Location:	Township - 27 North Range - 43 East, W.M. Section - 3, Northwestern Quadrant
Receiving Water:	Little Spokane River
Waterway Segment Number:	245501

STATEMENT OF PURPOSE

In September 1987, a Record of Decision (ROD) for interim and final remedial action at the Spokane County Colbert Landfill Superfund Site was signed by the Environmental Protection Agency and the Washington State Department of Ecology. The Colbert Landfill ROD was developed in accordance with the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). On March 9, 1989, Spokane County agreed to the requested remedial action by signing a Consent Decree.

The remedial action includes the management of the migration of contaminants present in the groundwater due to the Colbert Landfill. Contaminated groundwater will be extracted and treated for volatile organic compounds by air stripping. Treated groundwater is to be discharged to the Little Spokane River. Pursuant to Section 121(e) of CERCLA, a National Pollutant Discharge Elimination System (NPDES) permit is not required for remedial activities conducted entirely on-site. However, all substantive requirements for an NPDES permit must be met.

In compliance with the provisions of the Federal Water Pollution Control Act and the State of Washington Water Pollution Control Law, Chapter 90.48 RCW, the National Pollutant Discharge Elimination System Permit Program, Chapter 173-220 WAC, and the Water Quality Standards for Surface Waters of the State of Washington, Chapter 173-201A WAC, this document establishes interim requirements for discharge of treated groundwater to the the Little Spokane River during the first 90 days of full scale operation, beginning April 11, 1994.

FACT SHEET

This fact sheet explains the interim Substantive Requirements for the Colbert Landfill. The intent of this testing requirements for this short period of time (90 days) is to eliminate any redundant test or tests that can be proved to be unecessary, and to consequently, reduce the remediation cost on Spokane County. This fact sheet also explains the nature of the proposed discharge, the limits placed on the contaminants in treated groundwater, and the regulatory and technical basis for those limits. The final limits of discharge will be based on the efficiency of the treatment system, within the performance and evaluation criteria of the consent decree.

GENERAL INFORMATION

Facility Location: Colbert Landfill Site
Colbert, Spokane County, Washington

Discharge Type: Treated groundwater

Discharge Location: Township - 27 North
Range - 43 East, W.M.
Section - 3 Northwestern Quadrant

Receiving Water:

The receiving water is the Little Spokane River. Little Spokane River is considered a Class A surface water. The applicable receiving water quality standards are those adopted by the Washington State Department of Ecology and approved by the Environmental Protection Agency (EPA) Regional Administrator pursuant to Section 303 of the Clean Water Act. Applicable standards are contained in Chapter 173-201A WAC.

Facility Background and Description of Discharge:

The Colbert Landfill is a Spokane County owned sanitary landfill that was operated from the year 1968 through 1986. This landfill is located in Spokane County, approximately 15 miles north-northeast of Spokane, Washington, and covers 40 acres. During the five years from 1975 to 1980, a local electronics manufacturing company, KeyTronic Corporation, used the Colbert

Landfill to dispose of spent organic solvents, mainly methylene chloride and 1,1,1-trichloroethane (TCA), at an average rate of several hundred gallons a month. During the same period, a nearby military facility, Fairchild Air Force Base, also disposed of various solvent wastes at the site. A variety of other chemicals, such as pesticides and refinery tar residues, were also disposed of at the site.

A civil suit was instituted pursuant to Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act, as amended by the Superfund Amendments and Reauthorization Act of 1986. In addition, this action is brought by the State of Washington, pursuant to Chapter 70.105b, Revised Code of Washington (RCW) and Chapter 90.48 RCW.

Nature and extent of the problem:

Six volatile organic chemicals, all chlorinated aliphatic hydrocarbons, were the main contaminants detected in the groundwater at the Colbert Landfill Site. These organic chemicals are: methylene chloride, 1,1,1-trichloroethane (TCA), 1,1 dichloroethylene (DCE), 1,1 dicholoroethane (DCA) trichloroethylene (TCE), and tetrachloroethylene (PCE).

The effluent limits for these chemicals were based on the remediation goals established in the Record of Decision and best professional judgement. Effluent limits for the groundwater treatment system are based upon health protection levels and shall not be exceeded during the operational life of remedial action systems. In addition, permanent attainment of these levels in the groundwater throughout the site will indicate completion of the remedial action. These limits are not expected to impact the biological setting in the Spokane River, but rather enhance the flow in that segment of the river.

One of the requirements of the consent decree is the design and implementation of extractions wells and treatment systems for groundwater prior to discharge to the Little Spokane River.

The groundwater extraction system consists of two sets of extraction wells, which is designed to control the movement and migration of contaminants. Each set of extraction wells consist of at least eleven wells.

The groundwater treatment system is comprised of air stripping of organic solvents, mainly methylene chloride and 1,1,1-trichloroethane (TCA), 1,1 dichloroethylene (DCE), 1,1 dichloroethene (DCA), trichloroethylene (TCE), and tetrachloroethylene (PCE).

INTERIM SUBSTANTIVE REQUIREMENTS

S1. EFFLUENT LIMITATIONS

A. These interim requirements shall be in effect beginning on April 11, 1994 until July 11, 1994. The discharge of treated groundwater at the designated outfall at the Little Spokane River is subject to meeting the following limitations:

OUTFALL No. 1 EFFLUENT LIMITATIONS

Parameter	Daily Average	Daily Maximum
Flow	continuous	
Chloride	230 mg/L	
Dichloroethene;1,1-		4050 ug/L
Dichloroethylene;1,1-		7 ug/L
Iron	300 ug/L	
Manganese	50 ug/L	
Methylene Chloride		2.5-25* ug/L
Nitrates	10 mg/L	
pH		8.5
Total Phosphorus		930 ug/L
Tetrachloroethylene		0.7-7* ug/L
Trichloroethane; 1,1,1-		200 ug/L
Trichloroethylene		5 ug/L

* *The daily maximum will be determined as a result of the removal efficiency of the system. These figures are part of the evaluation and performance criteria in the Consent Decree.*

The daily average is defined as the average of the measured values obtained over a calendar month's time. The daily maximum is defined as the greatest allowable value for any calendar day.

S2. TESTING SCHEDULE

The Discharger shall monitor the influent and effluent of treated groundwater according to the following schedule:

Tests	Sample Point	Sampling Frequency	Sample Type
Priority Pollutant Metals (total). semi volatile organic compounds pesticides, PCBs**	Outfall, or designated point in treatment facility	Within 10 days of full start-up and monthly thereafter during this interim period.	Composite
Nitrate/Nitrite/ Ammonia/Total Kjeldah Nitrate(++)	Outfall	Monthly	Composite (+)
Algal growth(++)	Upstream of outfall, 300 feet down-stream of outfall.	Within 10 days of full start-up and monthly thereafter.	Grab
Volatile Organics Compound**	Outfall or designated point in the treatment facility.	Monthly	Composite
Electrical Conductivity(++)	Outfall or designated point in the treatment facility out-fall.	Daily	Composite
Turbidity (++)	Outfall	Daily during this interim period.	Grab

** See Attachment A for listing of elements and testing methods.
(+) 24-hour composite (see S4. B(2)).
(++) Monitor effluent only.

S3. CHRONIC BIOMONITORING

A. Chronic Biomonitoring (Effluent)

The Discharger shall complete two chronic fish bioassays tests from the outfall, one within 10 days, another with 40 days of full start-up of the treatment facility for the purpose of characterizing the effluent. Toxicity testing shall be conducted in accordance with protocols, monitoring requirements, and quality assurance/quality control (QA/QC) procedures specified in this section. The testing shall be conducted so as to determine the IC25 (concentration providing a 25% inhibition of growth or reproduction in the test organisms), and a chronic NOEC. These test values are not effluent limits.

Testing shall be conducted on the following organisms:

Freshwater Chronic Toxicity Test Species Methods
Fathead minnow: *Pimephales promelas* EPA/600/4-89/001

Chronic Phytotoxicity Test Species Method
Alga: *Selenastrum capricornutum* EPA/600/4-89/001

Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA/600/4-89/001.

Annual Book of ASTM Standards, Section 11, Water and Environmental Technology, Volume 11.04 Biological Effects and Environmental Fate.

Ecology will accept whole effluent chronic bioassay data produced in the last two years as fulfillment of this section if it meets the information and quality control requirements of this section.

The testing shall begin within ten days after the issue date of this Interim Discharge Requirement. A written report of the toxicity test results shall be submitted to Ecology within this interim interval. This final report shall list the IC25 and NOEC data for all species and tests, and detail any information on the results of any source control or treatability efforts during the year.

Ecology may issue an order or modify the Substantive Requirements based on the information provided in the final report. However, Ecology may specify a more sensitive species for use in routine monitoring if any single species is clearly the most sensitive species. A minimum of three replicates and a control shall be run. If the test cannot statistically detect a 30% difference in toxic effect between the effluent dilution and the control, then the number of replicates must be increased in future tests until a 30% or less difference in toxic effect becomes statistically significant. The mean of these replicates will be compared to the control mean using the method in Appendix H of Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/600/4-89/001) at the 0.05 level of significance. These test values are not effluent limits.

B. Monitoring Requirements

1. Testing shall be conducted on 24-hour composite samples of the effluent except when Ecology or the Discharger, with Ecology concurrence, determines that grab samples better represent toxicity. Water from the same source (natural or synthetic) as the water used for culturing the test organisms should be used as dilution water. Samples taken for toxicity testing shall be cooled to four degrees Celsius and sent to the lab immediately. The lab should begin the toxicity testing as soon as possible, but no later than 36 hours after the time that sampling was begun.

2. All tests shall measure the response of the organisms in 0 percent (control) and a sufficient number of effluent dilutions to accurately determine an IC25 and an NOEC.

3. Each written report shall include all relevant information outlined in Section 9, Report Preparation, of Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA/600/4-89/001, March 1989.

C. Protocols

The toxicity tests shall be conducted in accordance with the following protocols or approved modifications thereof:

Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA/600/4-89/001.

Annual Book of ASTM Standards, Section 11, Water and Environmental Technology, Volume 11.04 Biological Effects and Environmental Fate.

D. Quality Assurance/Quality Control Procedures

The Discharger shall follow the quality assurance procedures discussed in the protocols cited in this section, or approved modifications thereof. Test results which are not considered valid (i.e., excessive control mortality, or inadequate control growth or reproduction) will not be accepted by Ecology and the test(s) shall be repeated.

S4. CHEMICAL ANALYSIS OF INFLUENT AND EFFLUENT

A. Chemical Analysis of Influent and Effluent

The Discharger shall conduct chemical analyses of influent and effluent samples collected from the groundwater treatment system in accordance with protocols, monitoring requirements, and QA/QC procedures specified in this section.

Influent and effluent samples shall be analyzed according to S2 **requirements.**

Influent and effluent sampling shall be timed to coincide with one sampling in the chronic (effluent) biomonitoring studies.

B. Monitoring Requirements

1. Influent and effluent samples shall be analyzed according to S2 **requirements.**

2. The following samples shall be collected for analyses: 1) two samples of influent to groundwater treatment plant, with sampling times

at least one week apart; and 2) two samples of effluent from groundwater treatment plant, collected at such times that results, in conjunction with influent analyses results, may be used to estimate constituent removal efficiencies across the treatment system.

3. Each sample of the influent and effluent shall be representative composites consisting of continuous sampling or six grab samples equally spaced over a 24-hour period.

C. Protocols

Sample analysis shall be conducted in accordance with 40 CFR Part 136.

D. Quality Assurance/Quality Control Procedures

The Discharger shall follow the quality assurance procedures 40 CFR Part 136.

S.5 ACUTE FISH BIOASSAY:

Discharger shall be required to complete an Acute Fish Bioassay only in the event that the results of the Chronic Fish Bioassay indicate significant biological impacts.

S6. SPECIAL STUDIES:

Algal Growth Potential Study: The Discharger shall collect water samples from the Little Spokane River for the first year on a monthly basis from June 15 to September 15 and perform an algal growth potential study using the algae *Selenastrum capricornutum*. Water for the algal growth potential studies shall be collected upstream of the outfall of the treated groundwater and at a downstream location equivalent to the edge of the mixing zone. If no significant stimulation of algal growth potential is observed, then the algal growth potential studies shall be suspended. Studies shall be resumed only if there is a significant increase in the nitrogen or phosphorus concentrations in the treated groundwater.

S7. EXPIRATION OF THE INTERIM DISCHARGE:

This interim discharge to the Little Spokane River is a temporary measure for the groundwater treatment system to run on a full scale operation. The expiration date for this interim discharge is 90 days from the start-up date of the initial discharge. A final substantial requirements will be issued at the end of the 90 day period.

Attachment A

BACKGROUND WATER QUALITY DATA AND ESTIMATED EFFLUENT QUALITY

COLBERT LANDFILL RD/RA PROJECT

(Concentrations in ug/L except when indicated otherwise)

Effluent	Analytical Method	CD21C1	CD47	CD46	CD46-DUP	CD30A	Little Spokane River	Estimated Acid Batch Cleaning Solution Concentration	Estimated Effluent Concentration (a)	Estimated Effluent Mass Loading (b) (lb/day)
ALS (Total, in mg/l)										NC
inum	EPA 6010	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	76	0.055	NC
mony	EPA 6010	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	3 <	0.05 U	NC
nic	EPA 7060	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	11	0.006	NC
nic (pent)	EPA 7060	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NC	0.005 U	NC
nic (tri)	EPA 7060	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NC	0.005 U	NC
um	EPA 6010	0.271	0.079	0.292	0.297	0.114	0.052	36	0.18	3.4
lium	EPA 6010	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	1 <	0.005 U	NC
mium	EPA 6010	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	1 <	0.003 U	NC
ium	EPA 6010	172	60.6	140	143	104	30.3	42000	115	2200
mium (hex)	EPA 7195/6010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NC	0.01 U	NC
mium (total)	EPA 6010	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	1 <	0.005 U	NC
per	EPA 6010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	1	0.01 U	NC
	EPA 6010	0.033	0.02 U	0.065	0.068	0.02 U	0.099	192	0.046	0.88
	EPA 7421	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	5 <	0.002 U	NC
d	EPA 6010	60.3	19.5	48.6	49.5	22.5	7.37	294	34	660
nesium	EPA 6010	0.014	0.005 U	0.077	0.078	0.005 U	0.018	6	0.025	0.49
nganese	EPA 7470	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	5 <	0.0008	NC
cury	EPA 6010	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.24 <	0.02 U	NC
kel	EPA 6010	4.9	2.9	3.8	4.1	3.3	2 U	56 <	3.6	70
assium	EPA 7740	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	11 <	0.006	NC
enium	EPA 6010	12.9	11.5	12.3	2.6	9.64	8.34	10 <	11.3	220
ver	EPA 6010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	1 <	0.01 U	NC
dium	EPA 7841	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	11 <	0.008	NC
o	EPA 6010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	308	0.03	0.59
TALS (Dissolved, in mg/l)										NC
minum	EPA 6010	0.056	0.05 U	0.05 U	0.055	0.05 U	NT	76	0.058	NC
timony	EPA 6010	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	NT	3 <	0.050 U	NC
senic	EPA 7060	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NT	11	0.006 U	NC
senic (pent)	WF	NT	NT	NT	NT	NT	NT	NC	NC	NC
senic (tri)	WF	NT	NT	NT	NT	NT	NT	NC	NC	NC
rium	EPA 6010	0.269	0.081	0.301	0.303	0.111	NT	36	0.179	NC
ryllium	EPA 6010	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NT	1 <	0.005 U	NC
admium	EPA 6010	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	NT	1 <	0.003 U	NC
alcium	EPA 6010	171	62.4	144	145	102	NT	42000	116	NC
hromium (hex)	EPA 7195/6010	NT	NT	NT	NT	NT	NT	NC	NC	NC
hromium (total)	EPA 6010	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NT	1 <	0.005 U	NC
opper	EPA 6010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NT	1	0.010 U	NC
on	EPA 6010	0.033	0.02 U	0.05	0.051	0.02 U	NT	192	0.042	NC
ead	EPA 7421	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NT	5 <	0.002 U	NC
agnesium	EPA 6010	59.8	20.7	49.4	50	22	NT	294	34.5	NC
anganese	EPA 6010	0.014	0.005 U	0.075	0.077	0.005 U	NT	6	0.025	NC
ercury	EPA 7470	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.0005 U	NT	5 <	0.001 U	NC
ickel	EPA 6010	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NT	0.24 <	0.020 U	NC
otassium	EPA 6010	5	3.3	4	3.8	3.3	NT	56 <	3.74	NC
elenium	EPA 7740	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NT	11 <	0.006	NC
dium	EPA 6010	12.8	11.9	12.5	12.7	9.41	NT	10 <	11.37	NC
ver	EPA 6010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NT	1 <	0.010 U	NC
hallium	EPA 7841	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NT	11 <	0.008	NC
Zinc	EPA 6010	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	NT	308	0.03	NC

TABLE 1
BACKGROUND WATER QUALITY DATA AND ESTIMATED EFFLUENT QUALITY
COLBERT LANDFILL RD/RA PROJECT
(Concentrations in ug/L-except when indicated otherwise)

Analyte	Analytical Method	CD21C1	CD47	CD46	CD46-DUP	CD30A	Little Spokane River	Estimated Acid Batch Cleaning Solution Concentration	Estimated Effluent Concentration (a)	Estimated Effluent Mass Loading (b) (lb/day)
ANICS/CONVENTIONALS										
ity (mg/L)	EP 310.1	642	221	554	556	325	107	NC	405	7800
ia (total as N) (mg/L)	EP 350.3	0.07	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.04 <	0.053	NC
nate Alkalinity(mg/L)	SM 2320B	642	221	554	556	325	104	NC	405	7800
mg/L)	EP 405.1	4 U	4 U	4 U	4 U	4 U	4 U	3 <	4 U	NC
mg/L)	EP 410.2	5 U	5 U	5 U	5 U	5 U	10	4 <	5 U	NC
ide (mg/L)	EP 300.0	7.2	3.9	270	290	300	340	75220	176	3400
ia-Residual (mg/L)	EP 330.4	0.1 W	0.1 W	0.1 W	0.1 W	0.1 W	0.1 W	2 <	0.1 U	NC
m Fecal (CFU/100mL)	SM 9221C	2 W	2 W	2 W	2 W	2 W	50 J	NC	2 U	NC
CU)	EP 110.2	20 U	20 U	20 U	20 U	20 U	20 U	NC	20 U	NC
ide (mg/L)	EP 335.2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 <	0.01 U	NC
. Total Dissolved	N/A (c)	NT	NT	NT	NT	NT	NT	NC	NC	NC
ese (mg/L)	EPA 6010	673	241	563	568	344	106	42000	426	8200
ide (mg/L)	EP 300.0	1.4	5.1	2.8	2.8	2.9	0.6	4	3.2	62
e (mg/L)	EP 413.1	1 U	1 U	1 U	1 U	1 U	1 U	1 <	1 U	NC
l Grease (mg/L)	EP 360.1	1.6 J	7.3 J	4.00 J	3.70 J	8.20 J	8.25 J	NC	5.9	NC
n Dissolved (mg/L)	EP 150.1	6.7	7.7	7.2	7.2	7.1	8.5	2	7.2	NC
	EP 365.3	0.24	1.6	0.50	0.50	0.01 U	0.02	1	1.1 (g)	22
horus-Total (mg/L)	EP 160.2	5 U	5 U	5 U	5 U	5 U	5 U	6	5 U	NC
Suspended - Nonfilterable (mg/L)	EP 160.1	677	295	591	597	368	127	184000	465	9600
Dissolved - Filterable (mg/L)	EP 300.0	20	13	12	12	25	16	17	18	340
e (mg/L)	EP 376.1	2 U	2 U	2 U	2 U	2 U	2 U	2 <	2 U	NC
e-Hydrogen Sulfide (mg/L)	EP 170.1	13.1	11.9	13.9	13.9	12.1	NT	NC	12.7	NC
erature (°C) (e)	EP 415.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8	0.4 <	0.5 U	NC
mg/L)	EP 180.1	0.1 U	0.2	0.6	NT	NT	NT	NC	NC	NC
idity (NTU)										
NOCHLORINE PESTICIDES/PCBs										
	EPA 8080	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NC	0.04 U	NC
	EPA 8080	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NC	0.04 U	NC
	EPA 8080	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NC	0.5 U	NC
dane	EPA 8080	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NC	0.04 U	NC
	EPA 8080	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NC	0.04 U	NC
Metabolite (DDE)	EPA 8080	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NC	0.04 U	NC
Metabolite (TDE)	EPA 8080	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NC	0.04 U	NC
in	EPA 8080	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NC	0.04 U	NC
sulfan	EPA 8080	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NC	0.04 U	NC
n	EPA 8080	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NC	0.04 U	NC
achlor	EPA 8080	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NC	0.04 U	NC
chlorocyclohexane (Lindane)	EPA 8080	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NC	0.04 U	NC
chlorocyclohexane-Alpha	EPA 8080	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NC	0.04 U	NC
chlorocyclohexane-Beta	EPA 8080	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	NC	0.1 U	NC
oxychlor	EPA 8080	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	NC	0.1 U	NC
	EPA 8080	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NC	0.2 U	NC
	EPA 8080	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	NC	0.04 U	NC
ANOPHOSPHORUS PESTICIDES										
pyrifos	EPA 8141	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NC	0.5 U	NC
ion	EPA 8141	1 U	1 U	1 U	1 U	1 U	1 U	NC	1 U	NC
on	EPA 8141	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NC	0.5 U	NC
hion	EPA 8141	0.5 W	0.5 W	0.5 W	0.5 W	0.5 W	0.5 W	NC	0.5 U	NC
hion-methyl	EPA 8141	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	NC	0.5 U	NC
BICIDES										
nophenoxy Herbicides (2,4,5,-TP)	EPA 8150	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	NC	0.2 U	NC
nophenoxy Herbicides (2,4,-D)	EPA 8150	1 U	1 U	1 U	1 U	1 U	1 U	NC	1 U	NC

TABLE 1
BACKGROUND WATER QUALITY DATA AND ESTIMATED EFFLUENT QUALITY
COLBERT LANDFILL RD/RA PROJECT
(Concentrations in ug/L-except when indicated otherwise)

Constituent	Analytical Method	CD21C1	CD47	CD48	CD48-DUP	CD30A	Little Spokane River	Estimated Acid Batch Cleaning Solution Concentration	Estimated Effluent Concentration (a)	Estimated Effluent Mass Loading (lb) (lb/day)
SEMIVOLATILE ORGANICS										
Acenaphthene	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Benzidine	EPA 8270	50 U	NT	NT	NT	NT	NT	NC	50 U	NC
Chlorinated Benzenes (f)	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Chlorinated Naphthalenes (g)	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Chloroethyl Ether (bis-2)	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Chloroisopropyl Ether (bis-2)	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Chloromethyl Ether (bis)	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Chlorophenol 2	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Chloro-4,Methyl-3,Phenol	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Dibutyl Phthalate	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Dichlorobenzenes (h)	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	20 U	NC
Dichlorobenzidine 3,3	EPA 8270	20 U	NT	NT	NT	NT	NT	NC	5 U	NC
Dichlorophenol 2,4	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Diethylphthalate	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Dimethyl Phenol 2,4	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Dimethyl Phthalate	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Dinitrotoluene 2,4	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	20 U	NC
Dinitro-o-cresol 2,4	EPA 8270	20 U	NT	NT	NT	NT	NT	NC	20 U	NC
Diphenylhydrazine 1,2	EPA 8270	20 U	NT	NT	NT	NT	NT	NC	5 U	NC
Di-2-Ethyl Hexyl Phthalate	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Fluoranthene	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Hexachlorobenzene	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Hexachlorobutadiene	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	10 U	NC
Hexachlorocyclopentadiene	EPA 8270	10 U	NT	NT	NT	NT	NT	NC	5 U	NC
Hexachloroethane	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Isophorone	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Naphthalene	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Nitrobenzene	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	50 U	NC
Nitrophenols (i)	EPA 8270	50 U	NT	NT	NT	NT	NT	NC	10 U	NC
Nitrosodibutylamine N	EPA 8270	10 U	NT	NT	NT	NT	NT	NC	10 U	NC
Nitrosodiethylamine N	EPA 8270	10 U	NT	NT	NT	NT	NT	NC	5 U	NC
Nitrosodimethylamine N	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Nitrosodiphenylamine N	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	10 U	NC
Nitrosopyrrolidine N	EPA 8270	10 U	NT	NT	NT	NT	NT	NC	10 U	NC
Pentachlorobenzene	EPA 8270	10 U	NT	NT	NT	NT	NT	NC	30 U	NC
Pentachlorophenol	EPA 8270	30 U	NT	NT	NT	NT	NT	NC	5 U	NC
Phenol	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Phthalate Esters (j)	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Polynuclear Aromatic Hydrocarbons (k)	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Tetrachlorobenzene 1,2,4,5	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Trichlorophenol 2,4,5	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
Trichlorophenol 2,4,6	EPA 8270	5 U	NT	NT	NT	NT	NT	NC	5 U	NC
VOLATILE ORGANICS (l)										
1,1-Dichloroethane	EPA 8010	NT	NT	NT	NT	NT	NT	NC	180 (m)	3.6
1,1-Dichloroethylene	EPA 8010	NT	NT	NT	NT	NT	NT	NC	7.0 (m)	0.13
Methylene chloride	EPA 8010	NT	NT	NT	NT	NT	NT	NC	25 (m)	0.48
Tetrachloroethylene	EPA 8010	NT	NT	NT	NT	NT	NT	NC	7.0 (m)	0.13
Trichloroethane 1,1,1	EPA 8010	NT	NT	NT	NT	NT	NT	NC	200 (m)	3.8
Trichloroethylene	EPA 8010	NT	NT	NT	NT	NT	NT	NC	5 (m)	0.1

TABLE 1
BACKGROUND WATER QUALITY DATA AND ESTIMATED EFFLUENT QUALITY
COLBERT LANDFILL RD/RA PROJECT
(Concentrations in ug/L-except when indicated otherwise)

luent	Analytical Method	CD21C1	CD47	CD46	CD46-DUP	CD30A	Little Spokane River	Estimated Acid Batch Cleaning Solution Concentration	Estimated Effluent Concentration (a)	Estimated Effluent Mass Loading (lb) (lb/day)
LLANEOUS										
-n	EPA 8240	10 U	10 U	10 U	10 U	10 U	10 U	NC	10 U	NC
-nitrile	EPA 8240	100 U	100 U	100 U	100 U	100 U	100 U	NC	100 U	NC

tical Methods

W-846 Test Methods for Evaluating Solid Waste, 1986 with 1987 revisions.
6010 = Inductively Coupled Plasma Atomic Emission Spectroscopy
7196 = Chromium, Hexavalent (Coprecipitation)
8010 = Halogenated Volatile Organics.
8030 = Acrolein, Acrylonitrile, Acetonitrile.
8080 = Organochlorine Pesticides and PCBs.
8141 = Organophosporus Pesticides.
8150 = Chlorinated Herbicides.
8240 = GC/MS for Volatile Organics
8270 = GC/MS for Semivolatile Organics
8290 = Dibenzo-p-dioxins and furans.
9010 = Cyanide
Walter Ficklin, U.S.G.S. "Separation of As(III) and As(V) in Groundwater".
Methods of Chemical Analysis of Water and Wastes, EPA 1983.
Standard Methods.

eviations and Data Qualifications:

Degrees Centigrade.
milliliter.
Not calculated.
Not tested.
= Nephelometric turbidity units.
Undetected at the detection limit given.
he analyte was analyzed and positively identified, but the associated numerical
alue may not be consistent with the amount actually present in the environmental sample.
The analyte was analyzed for and was not present above the associated value. The associated value may not accurately or precisely represent the
concentration necessary to detect the analyte in this sample.
The constituent was less than the associated calculated value. The associated value may not accurately or precisely represent the
concentration necessary to detect the analyte in this sample.

notes:

This is a calculated value based on the estimated contribution of groundwater to the Phase II system from the vicinity of the sampled wells, and
discharge of the batch cleaning solution. The concentration estimate is based on a total extraction rate of 1,600 gpm, with contributions
of 15%, 33%, 26%, and 26% for Wells CD-21C1, CD-30A, CD-46C2, and CD-47C2, respectively, and a 0.1 gpm discharge rate of the batch cleaning solution.
Based on effluent discharge rate of 1,600 gpm at the estimated effluent concentration.
Not listed in any available method references.
Includes 0.84 mg/l contribution from phosphate sequestering agent.
Values are based on field results.
The sum of 1,2-, 1,3-,1,4-dichlorobenzene, 1,2,4-trichlorobenzene, and hexachlorobenzene.
Value is for 2-chloronaphthalene only.
The sum of 1,2-, 1,3-, and 1,4-dichlorobenzene.
The sum 2- and 4-nitrophenol and 2,4-dinitrophenol.
The sum of dimethylphthalate, diethylphthalate, di-n-butylphthalate, butylbenzylphthalate, bis(2-ethylhexyl)phthalate and di-n-octylphthalate.
The sum of carcinogenic PAH: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene,
chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene.
Volatile organics were not tested for, with the concurrence of Ecology, because of the adequacy of existing data.
Effluent discharge standards (Evaluation Criteria) from Project Consent Decree, except for 1,1-DCA (which is highest measured concentration).

TABLE 2

POTENTIAL NPDES WATER QUALITY CRITERIA
COLBERT LANDFILL RD/RA PROJECT
(Concentrations in ug/L)

Constituent	POL (b)	Federal Water Quality Criteria (a)				State WAC 173-201
		Aquatic Fresh Chronic	Water and Fish Ingestion (c)	Fish Consumption Only	Drinking Water MCL	Fresh Chronic (d)
METALS						
Antimony	60.0	1600.0 (e)	146.0	45000.0		
Arsenic	10.0		0.0 (f)	0.0 (f)	50.0	
Arsenic (pent)	-	48.0 (e)				
Arsenic (tri)	-	190.0				
Barium	200.0		1,000		1,000	
Beryllium	5.0	5.3 (e)	0.0 (f)	0.1 (f)		
Cadmium	5.0	1.1 (g)	10.0		10.0	1.1 (g,h)
Chromium (hex)	10.0	11.0	50.0		50.0	11.0 (h)
Chromium (tri)	10.0	210.0 (g)	1.7E+05	3.4E+06	50.0	210.0 (g,h)
Copper	25.0	12.0 (g)				12.0 (g,h)
Iron	100.0	1000.0	300.0			
Lead	3.0	3.2 (g)	50.0		50.0	3.2 (g,h)
Manganese	15.0		50.0	100.0		
Mercury	0.2	0.0	0.1	0.1	2.0	0.0 (h)
Nickel	40.0	160.0 (g)	13.4	100.0		160.0 (g,h)
Selenium	5.0	35.0	10.0		10.0	35.0 (h)
Silver	10.0	0.1	50.0		50.0	
Thallium	10.0	40.0 (e)	13.0	48.0		
Zinc	20.0	110.0 (g)				110.0 (g,h)
INORGANICS/CONVENTIONALS						
Alkalinity	1.0	20,000 (i)				1808.0 (h,j,k)
Ammonia (total as N)	0.0	1808.0 (h,j,k)				11.0 (h)
Chlorine (residual)	0.1	11.0			<1/100mlg	<100/100ml
Coliform Fecal	N/A					
Color	1.0	25.0 (l)				5.2 (h)
Cyanide	10.0	5.2	200.0			110% saturation (k,n)
Gasses, Total Dissolved	N/A	110% saturation (k,m)				
Nitrates	N/A		10,000		10,000	
Oil and Grease	5.0	Surface water to be free of floating oil --				8000.0 (l,n)
Oxygen Dissolved	0.1	8000.0 (l,m)				6.5-8.5 (o)
pH	N/A	6.5-9.0 (o)				
Solids Suspended	N/A	(p)				
Solids Dissolved	N/A		2.5E+05			
Sulfide-Hydrogen Sulfide	0.1	2.0				
Temperature (°C)	N/A	18.0 (n,q)				16 C (n)
TOC						
Turbidity (NTU)	0.5					<5 NTU over BKG (n)

TABLE 2

POTENTIAL NPDES WATER QUALITY CRITERIA
COLBERT LANDFILL RD/RA PROJECT
(Concentrations in ug/L)

Constituent	POL (b)	Federal Water Quality Criteria (a)				State WAC 173-201
		Aquatic Fresh Chronic	Water and Fish Ingestion (c)	Fish Consumption Only	Drinking Water MCL	Fresh Chronic (d)
ORGANOCHLORINE PESTICIDES/PCBs						
Aldrin	0.1	3.0 (h)	7.4E-05 (f)	7.9E-05 (f)		
BHC	0.1	100.0 (e,h)				0.0 (g,r)
Chlordane	0.1	0.0	4.6E-04 (f)	4.6E-04		
DDT	0.1	0.0	2.4E-05 (f)	2.4E-05 (f)		
DDT Metabolite (DDE)	N/A	1050.0 (e,h)				
DDT Metabolite (TDE)	0.02, 0.1	0.1 (e,h)	7.0E-05 (f)	7.6E-04 (f)		0.1 (r)
Dieldrin	0.14, 0.04; 0.1	0.0	74.0	159.0		0.0 (r)
Endosulfan	0.06, 0.1	0.1	1.0		0.2	0.0 (r)
Endrin	0.1	0.0	2.6E-04 (f)	2.9E-04 (f)		0.0 (r)
Heptachlor	0.1	0.0	0.0 (f)	0.1 (f)	4.0	0.1 (r)
Hexachlorocyclohexane (Lindane)	0.1	0.1	0.0 (f)	0.0 (f)		
Hexachlorocyclohexane-Alpha	0.1		0.0 (f)	0.1 (f)		
Hexachlorocyclohexane-Beta	0.5	0.0	100.0		100.0	
Methoxychlor	1.0	0.0	7.9E-05 (f)	7.9E-05		0.0 (r)
PCBs	10.0	0.0				
Mirex	5.0	0.0	7.1E-04 (f)	7.3E-04 (f)	5.0	0.0 (h)
Toxaphene						
ORGANOPHOSPHORUS PESTICIDES						0.0 (h)
Chlorpyrifos	0.7	0.0				
Demeton	1.2	0.1				
Guthion	N/A	0.0				
Malathion	50.0	0.1				0.0 (h)
Parathion	10.0	0.0				
HERBICIDES						
Chlorophenoxy Herbicides (2,4,5,-TP)	1.7		10.0			
Chlorophenoxy Herbicides (2,4,-D)	12.0		100.0			
SEMIVOLATILE ORGANICS						
Acenapthene	10.0	520.0 (e)	1.2E-04 (f)	5.3E-04 (f)		
Benzidine	N/A	2,600				
Chlorinated Benzenes	N/A (a)	50.0 (e)				
Chlorinated Napthalenes	N/A (a)	1600.0 (e,h)				
Chloroethyl Ether (bis-2)	10.0		0.0 (f)	1.4 (f)		
Chloroisopropyl Ether (bis-2)	10.0		34.7	4360.0		
Chloromethyl Ether (bis)	N/A		0.0038 (f)	0.0 (f)		
Chlorophenol 2	10.0	2,000 (e)				
Chloro-4,Methyl-3,Phenol	10.0	30.0 (e,h)				

TABLE 2

POTENTIAL NPDES WATER QUALITY CRITERIA
COLBERT LANDFILL RD/RA PROJECT
(Concentrations in ug/L)

Constituent	POL (b)	Federal Water Quality Criteria (a)				State WAC 173-201
		Aquatic Fresh Chronic	Water and Fish Ingestion (c)	Fish Consumption Only	Drinking Water MCL	Fresh Chronic (d)
SEMIVOLATILE ORGANICS (continued)						
Dibutyl Phthalate	10.0		35,000	1.5E+05		
Dichlorobenzenes	10.0	763.0 (e)	400.0	2600.0		
Dichlorobenzidine	20.0		0.0 (f)	0.0 (f)		
Dichlorophenol 2,4	10.0	365.0 (e)	3,090			
Diethylphthalate	10.0		3.5E+05	1.8E+06		
Dimethyl Phenol 2,4	10.0	2120.0 (e,k)				
Dimethyl Phthalate	10.0		3.1E+05	2.9E+06		
Dinitrotoluene 2,4	10.0		0.1 (f)	9.1 (f)		
Dinitro-o-cresol 2,4	50.0		13.4	765.0		
Diphenylhydrazine 1,2	N/A	270.0 (k)				
Di-2-Ethyl Hexyl Phthalate	10.0		15,000	50000.0		
Fluoranthene	10.0	3980.0 (e,k)	42.0	54.0		
Hexachlorobenzene	10.0	3.7	7.2E-04 (f)	7.4E-04 (f)		
Hexachlorobutadiene	10.0	9.3 (e)	0.5 (f)	50.0 (f)		
Hexachlorocyclopentadiene	10.0	5.2 (e)	206.0			
Hexachloroethane	10.0	540.0 (e)	1.9	8.7		
Isophorone	10.0	117000.0 (e,k)	5,200	5.2E+05		
Naphthalene	10.0	620.0 (e)				
Nitrobenzene	50.0	17000.0 (e,k)	19,800			
Nitrophenols	10.0	150.0 (e)				
Nitrosodibutylamine N	20.0		0.0 (f)	0.6 (f)		
Nitrosodiethylamine N	100.0		8.0E-04 (f)	1.2 (f)		
Nitrosodimethylamine N	10.0		0.0014 (f)	16.0 (f)		
Nitrosodiphenylamine N	40.0		4.9 (f)	16.1 (f)		
Nitrosopyrrolidine N	10.0		0.0 (f)	91.9 (f)		
Pentachlorobenzene	50.0		74.0	85.0		
Pentachlorophenol	10.0	13.0 (f)	1,010		1000.0	
Phenol	N/A (a)	2,560 (e)	3,500			
Phthalate Esters	N/A (a)	3.0 (e)				
Polynuclear Aromatic Hydrocarbons	10.0		0.0 (f)	0.0 (f)		
Tetrachlorobenzene 1,2,4,5	50.0		38.0	48.0		
Trichlorophenol 2,4,5	10.0		2,600			
Trichlorophenol 2,4,6		970.0 (e)	1.2 (f)	3.6 (f)		
VOLATILE ORGANICS						
Dichloroethylenes	1.3	11600.0 (e,k)	0.0 (f)	1.9 (f)		
Tetrachloroethylene	3.0	840.0 (e)	0.8 (f)	8.9 (f)		
Trichloroethane 1,1,1	0.3		18,400	1.03E+06	200.0 (v)	
Trichloroethylene	1.2	21900.0 (e)	2.7 (f)	80.7 (f)	5.0 (v)	

TABLE 2

POTENTIAL NPDES WATER QUALITY CRITERIA
COLBERT LANDFILL RD/RA PROJECT
(Concentrations in ug/L)

Constituent	POL (b)	Federal Water Quality Criteria (a)				State WAC 173-201
		Aquatic Fresh Chronic	Water and Fish Ingestion (c)	Fish Consumption Only	Drinking Water MCL	Fresh Chronic (d)
MISCELLANEOUS						
Acrolein	7.0	21.0 (e)	320.0	780.0		
Acrylonitrile	5.0	2600.0 (e)	0.1 (f)	0.7 (f)		

N/A Not available.
°C = Degrees Centigrade.
MCL = maximum contaminant level
ml = milliliter.
NTU = National turbidity units.

(a) Quality Criteria for Water 1986 (EPA 440/5-86-001).
(b) POL based on the analytical method identified in Table 1.
(c) Values presented in this column are human health-based only.
(d) Freshwater chronic criteria from WAC 173-201-047, except where noted otherwise
(e) Insufficient data to develop criteria. Value presented is the LOEL - lowest observed effect level.
(f) Human health criteria for carcinogens reported for three risk levels. Value presented is the 10-6 risk level.
(g) Hardness dependent criteria (100 mg/L used)
(h) A 4-day average concentration not to be exceeded more than once every three years on the average.
(i) The value represents a minimum concentration.
(j) Concentration based on pH = 6.5, temperature = 10°C, and salmonids present.
(k) Value presented is based on fresh acute criteria in absence of fresh chronic values.
(l) Criteria based on most stringent maximum value for sources of industrial water supply.
(m) State criteria based on interpretation of federal criteria.
(n) Criteria based on WAC 173-201-045 for general use ,Class A river.
(o) The values represent an acceptable range.
(p) Suspended solids should not reduce depth of photosynthetic compensation point by more than 10% from seasonal norm.
(q) A 1-hour average concentration not to be exceeded more than once every three years on the average.
(r) A 24-hour average not to be exceeded.
(s) See individual analytes for POL and analytical method.
(t) pH dependent criteria (7.8 pH used)
(u) Effective August 8, 1987 FR Vol. 42, No. 130.

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COLBERT LANDFILL

TREATED GROUND WATER DISCHARGE SCHEDULE

MARCH 3, 1994	**Public meeting**
~~MARCH 18~~, 1994 APRIL 6, 1954	**Short-term discharge monitoring requirements finalized**
~~MARCH 22~~, 1994 APRIL 11, 1994	**Scheduled start for the treatment system and discharge using the initial short-term requirements**
JUNE 20, 1994	**Revise (if necessary) initial discharge requirements**
	Start of public comment period on discharge limits
JULY 20, 1994	**End of public comment period**
AUGUST 19, 1994	**Substantive requirements in effect for long-term discharge**